Le professeur Dugal nous a aussi spécifié que lui et son équipe ne se borneront pas à détecter la présence des médications proscrites. Ils veulent émettre de véritables jugements pharmacologiques. "Avant de formuler un jugement final entraînant la disqualification d'un athlète, nous prendrons toutes les précautions requises et le moindre doute sera à l'avantage des athlètes". L'équipe de l'INRS pourra consulter un comité aviseur formé de spécialistes mais la décision finale reste leur privilège absolu.

Quant au nombre de stéroïdes que ses laboratoires sont actuellement capables d'identifier, le professeur Dugal en garde le secret. C'est une surprise qu'il réserve aux participants qui voudraient tenter la chance. "Il est vrai que nous ne pouvons pas encore identifier les 45 stéroïdes actuellement sur le marché. Et il est aussi possiblement vrai que pour certains stéroïdes, l'arrêt de la médication 3 semaines avant les Jeux peut garantir l'immunité à l'usager. Notre prétention n'est pas d'arriver à bannir toutes les drogues défendues. Le fait même que nos tests soient faits à partir d'une sélection statistique infirme une telle hypothèse. Les tests sont avant tout un moyen de dissuasion et il s'avère très efficace si l'on regarde la baisse importante de l'usage des amphétamines par les athlètes depuis l'institution des contrôles. En l'absence de campagnes d'éducation populaire, c'est là un très bon moyen d'empêcher les jeunes athlètes et tous leurs admirateurs qui voudraient suivre leurs traces, de faire un tort irréparable à leur santé en ingurgitant toute une panoplie de médicaments. Car s'il n'est pas prouvé que ces médicaments sont efficaces, il est reconnu qu'ils sont dangereux lorsqu'utilisés dans le cadre d'un effort physique soutenu. En effet les recherches sur le sujet démystifient à toutes fins utiles l'aide que l'athlète peut recevoir de telles pratiques. Cet appui serait plus psychologique qu'autre chose."

La méthode de détection utilisée sera celle de la chromatographie en phase gazeuse. Ce processus est entièrement automatisé et les erreurs de manipulations pratiquement éliminées. De plus les rapports d'analyses seront tous informatisés. Pour l'identification des stéroïdes anabolisants le couplage chromatographie en phase gazeuse et spectrométrie de masse sera employé. L'utilisation des ordinateurs permettra une comparaison avec des spectogrammes obtenus à des banques spectrales internationales dans de très brefs délais.

Ce qui restera de toute cette expérience à ce groupe de chercheurs? Avant tout un laboratoire superbement équipé pour continuer des recherches pharmacologiques surtout en pédiatrie. Un montant de $400 000 a en effet été investi dans l'entreprise. Ce laboratoire de pharmacologie clinique superinformatisé est à l'heure actuelle le seul laboratoire au Canada à pouvoir faire plus de 200 analyses par jour. Aux Etats-Unis il n'y a que deux ou trois laboratoires qui peuvent l'égaler. Quant à l'expérience olympique elle-même, sans vouloir en préjuger, le professeur Dugal n'affiche pas un enthousiasme excessif. "La liste complète des médicaments interdits par le CIO devrait faire l'objet de nouvelles études," concluait le chercheur. CLAIRE LALONDE

R.T. McKenzie: a great man to remember in Canada's Olympic year

By Peat O'Neil

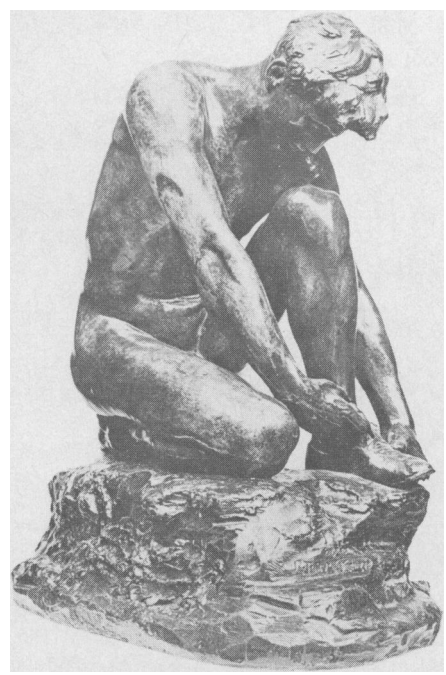
The patient had a sore tooth, and in 19th century Montreal a medical doctor considered yanking out a tooth just part of his regular office practice. So this minor dentistry operation was performed, with perhaps a little athletic zest, because the patient, when he could speak again, queried anxiously, "Am I all right, doctor?"

And the doctor, stuffing something into his lab coat pocket, assured the patient he would indeed survive, even without the three teeth and piece of jawbone that had been overzealously removed.

It was perhaps fortunate that R. Tait McKenzie left active practice after only a few years. His medical technique may have been rough at times, but he exhibited extraordinary command in his artwork, which has been compared favourably to ancient Greek sculpture by the *cognoscenti*.

But McKenzie was no ham-fisted medical failure. Indeed, he built an international reputation in physical education and rehabilitative medicine. His combination of talents brings to mind the great figures of the Renaissance.

McKenzie's involvement with sculptural composition began in 1905, and he worked steadily until his death in 1938. This aspect of his life overlapped his careers in physical education and medicine.



The competitor, 1906
Public Archives, Canada

His anatomy training at McGill University led to extensive examination of human movement and physical composition. His view of the human body as the ultimate art form came also from his experience as athlete and physical educator. McKenzie found a connection between human physical effort, the healthy developed body and an art form that could communicate to a wide audience. Human shape and movement is beautiful, stated McKenzie the artist in his sculpture. He extended this philosophy to medicine by emphasizing need for physical activity in rehabilitative and preventive medicine programs established during World War I — a doctrine he enunciated in a speech to the CMA annual meeting in Montreal in 1917.

Born in Almonte, on May 26, 1867, McKenzie's early educational career was hardly distinguished. "McKenzie, your head is full of rats and straw," remarked one teacher on a report card. But the man persisted and entered McGill University in 1885 to study medicine. The family was not wealthy, so McKenzie worked as a nightwatchman to finance his education.

After receiving a medical degree in

1892, the young doctor found work as a ship's surgeon on a steamship line between Montreal and Liverpool, thus establishing a lifelong interest in travel. Tutoring sons of Lord Aberdeen led to the position of physician to the governor-general.

McKenzie began his academic work as demonstrator for McGill's anatomy department. But his interests were focused more on the healthy, active body; he accepted the medical directorship of physical training at McGill, a post created for him in 1894. He instigated compulsory medical examinations for students, despite the scepticism of other Canadian educators and the students involved. (Some universities in the United States had begun student medical examinations, but that requirement was considered an intrusion on privacy in Canada.)

McKenzie's preoccupation with physical education came from his own participation in sports. Not having a naturally athletic body, he strengthened himself with gymnastics. At McGill he played football, swam competitively, fenced, boxed and competed in track-and-field events.

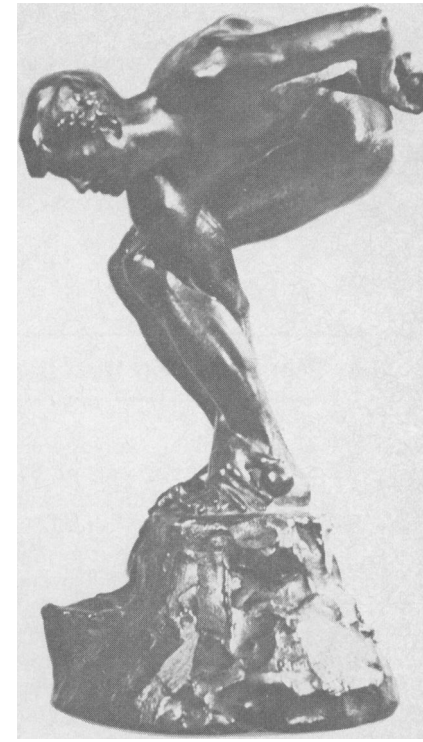
McKenzie's personal resolve to be strong resembles Teddy Roosevelt's single-minded determination to overcome physical weakness. Was there some spiritual kinship between these contemporaries? A friend gave Roosevelt the first bronze edition of McKenzie's work "The Sprinter", which the US president kept on his desk at the White House.

McKenzie believed the effects of exercise were universally beneficial. His appreciation for the body as esthetic perfection grew from this involvement in physical activity. To translate the information about stresses and beauty of activity, McKenzie experimented with sculpture.

Using the scientific approach of basing sculpted figures on average real body measurements, he explored the artistic expression of a human body. After completing a few works, McKenzie felt anthropometry was too confining, and he devoted himself to free interpretation of the body in movement. But he remained rooted in realistic forms — an important factor, since McKenzie wanted his art to communicate literal information about anatomy and motion as well as the abstract qualities of beauty and emotion.

McKenzie did not represent women in his athletic sculpture. One must remember that sports programs were virtually non-existent for females when McKenzie began his artistic career. He certainly appreciated and enjoyed women for physical as well as intellectual qualities, and had he lived in a different era, he would have included female athletes as models.

Speaking of McKenzie's interest in women, a Montreal physician recalled one story concerning his colleague. "McKenzie referred a woman to me for examination and treatment. I found nothing wrong with the patient. When I next saw Tait I asked him why he had sent the young woman to me when she was quite well. 'Yes,' McKenzie replied, 'but wasn't she a peach?' "



Supple juggler, 1906
Public Archives, Canada

In 1907 McKenzie married Ethel O'Neil of Hamilton, ON. She was a pianist who had served as head of the music department of a women's college in Kentucky while still in her early 20s. Sensitive to all the fine arts, Ethel O'Neil McKenzie was also devoted to people and shared McKenzie's travels and interests while publishing her own poetry and continuing to study music.

Most of McKenzie's professional life occurred at the University of Pennsylvania, where he directed the department of physical education from 1904 until 1931. Although based in Philadelphia, McKenzie travelled the world and considered himself an international person; nevertheless he remained a Canadian citizen. His concern for his homeland is exhibited in a letter written in 1920 to Mackenzie King which discussed a memorial to Wilfred Campbell:

> I have been so loaded up with work that it is difficult for me to get at these sketches, but as it is the first olive branch extended to me from Canada, I feel like seizing it. It is curious how one yearns for recognition among one's own people.

Tait McKenzie's achievements in medicine, art and physical education are recognized in the United States and Europe, but few Canadians are aware of his accomplishments. His concern for his country of birth and dream of acknowledgement by Canadians should lead us, particularly in this Olympic year, to call him a Canadian hero.■

The Mill of Kintail, Almonte, ON, McKenzie's summer home